



Robert Greene Sterne Edward J. Kessler Jorge A. Goldstein David K.S. Cornwell Robert W. Esmond Tracy-Gene G. Durkin Michael B. Ray Robert E. Sokohl Eric K. Steffe Michael Q. Lee Steven R. Ludwig John M. Covert Linda E. Alcom Robert C. Millonig Donald J. Featherston Lawrence B. Bugaisky Michael V. Messinger Judith U. Kim Timothy J. Shea, Jr. Patrick E. Garrett Heidi L. Kraus Edward W. Yee Albert L. Ferro\* Donald R. Banowit Peter A. Jackman Teresa U. Medler Jeffrey S. Weaver Kendrick P. Patterson Vincent L. Capuano Eldora Ellison Floyd Thomas C. Fiala Brian J. Del Buono Virgil Lee Beaston Kimberly N. Reddick Theodore A. Wood Elizabeth J. Haanes Joseph S. Ostroff Frank R. Cottingham Christine M. Lhulier Rae Lynn Frengaman Jane Shershenovich' George S. Bardmesser Daniel A. Klein' Jason D. Eisenberg Michael D. Specht Andrea J. Kamage Tray L. Muller' LuAnne M. DeSantis John J. Figueroa Ann E. Summerfield Tiera S. Coston Aric W. Ledford' Jessica L. Parezo Timothy A. Doyle\*
Gaby L. Longsworth\*
Nicole D. Dretar\*
Ted J. Ebersole
Jyoti C. Iyer\*
Registered Patent Agents\*
Karen R. Markowicz
Nancy J. Leith
Helene C. Carkon

Karen R. Markowicz Nancy J. Leith Helene C. Carlson Matthew J. Dowd Aaron L. Schwartz Katrina Y. Pei (Duach Bryan L. Skelton Robert A. Schwartzman Teresa A. Colella Jeffrey S. Lundgren Method C. Schwartzman Teresa A. Colella Eric D. Hayes Michelle K. Holoubek Robert H. DeSelms Simon J. Elliott Julie A. Heider Mita Mukherjee Scott M. Woodhouse

Of Counsel Kenneth C. Bass III Evan R. Smith Marvin C. Guthrie

\*Admitted only in Maryland \*Admitted only in Virginia •Practice Limited to Federal Agencies

June 16, 2004

WRITER'S DIRECT NUMBER: (202) 772-8525 INTERNET ADDRESS: BRIAND@SKGF.COM

Art Unit 1614

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Re:

U.S. Utility Patent Application

Appl. No. 10/733,582; Filed: December 12, 2003

For: Ordered Molecular Presentation of Antigens, Method of Preparation

and Use

Inventors:

Renner et al.

Our Ref:

1700.0030003/JAG/BJD/SJE

Sir:

Transmitted herewith for appropriate action are the following documents:

- 1. Information Disclosure Statement;
- 2. Form PTO-1449 (25 sheets citing 101 documents);
- 3. 74 documents cited in Form PTO-1449 (attached); and
- 4. One (1) return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Brian J. Del Buono Attorney for Applicants

to, 2014

Registration No. 42,473 BJD/SJE/lam

275010.1

: 1100 New York Avenue, NW : Washington, DC 20005 : 202.371.2600 202.371.2540 : www.skgf.com

**Enclosures** 



In re application of:

Renner et al.

Appl. No.: 10/733,582

Filed: December 12, 2003

For: Ordered Molecular Presentation of Antigens, Method of Preparation and

Use

Confirmation No.: 4575

Art Unit: 1614

Examiner: To be assigned

Atty. Docket: 1700.0030003/JAG/BJD/SJE

## **Information Disclosure Statement**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§1.56, 1.97 and 1.98.

A copy of documents **AO3**, and **AR1** to **AR25** is provided. Copies of documents **AL1** to **AO2** were previously cited or submitted in an IDS in compliance with 37 C.F.R. § 1.98(a)-(c) in Applicants' 35 U.S.C. § 120 priority Application No. 09/449,631, filed November 30, 1999, and are therefore not provided.

A copy of documents AA1 to AC2 is not provided in accordance with the U.S. Patent and Trademark Office OG notice of August 5, 2003, which states "[t]he Office hereby waives the requirement under 37 C.F.R. § 1.98 (a)(2)(i) for submitting a copy of each cited U.S. patent and each U.S. patent application publication filed after June 30; 2003."

In accordance with 37 C.F.R. § 1.98(a)(3), Applicants' undersigned representative submits the following concise explanation of the relevance of the non-English language document **AO1** submitted herewith.

Document AO1, cited on the accompanying Form PTO-1449, is a non-English language PCT application. The relevance of Document AO1 may be ascertained by reference to the unverified English language abstract appearing therein. Furthermore, Applicants submit herewith Document No. AI1, which issued from a U.S. national phase application based on Document AO1. Thus Applicants believe that Document AI1 is an English language document related to Document AO1.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits. No statement or fee is required.

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449, and to indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Brian J. Del Buono Attorney for Applicants Registration No. 42,473

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600

274038\_2.DOC

Page 1 of 25

INFORMA INFORMA

**FORM PTO-1449** 

MATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
1700.0030003/JAG/BJD/SJE
FIRST NAMED INVENTOR
Renner et al.
FILING DATE
December 12, 2003

APPLICATION NO.
10/733,582

ART UNIT
1614

EVALUED.	<del></del>	1000	IMENIT	U.S. PA	ATENT DOCUMENTS		<del></del>	<del></del>	
EXAMINER NITIAL		NUM	UMENT BER	DATE	NAME	CLASS	SUB-CLASS	FILING DAT	F
NITIAL	AA1		1,651	12/10/1991	Sabara et al.	424	89	03/05/1990	
	AB1	5,334	1,394	08/02/1994	Kossovsky et al.	424	494	01/04/1993	
	AC1	5,374	1,426	12/20/1994	Sabara et al.	530	403	10/30/1989	
	AD1	5,739	9,026	04/14/1998	Garoff et al.	435	240.2	08/13/1992	
	AE1	5,770	0,380	06/23/1998	Hamilton et al.	435	7.1	09/13/1996	
	AF1	5,766	5,602	06/16/1998	Xiong et al.	424	218.1	01/19/1995	
	AG1	5,792	2,462	08/11/1998	Johnston et al.	424	199.1	05/23/1995	
	AH1	5,814	1,482	09/29/1998	Dubensky, Jr. et al.	435	69.3	10/30/1996	
	Al1	5,87	1,747	02/16/1999	Gengoux-Sedlik et al.	424	208.1	04/28/1995	
	AJ1	5,789	9,245	08/04/1998	Dubensky, Jr. et al.	435	320.1	10/30/1996	
	AK1	6,004	4,763	12/21/1999	Gengoux et al.	435	7.24	05/12/1998	
				FOREIGN	PATENT DOCUMENTS				
XAMINER NITIAL		DOC NUM	UMENT BER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATI	
	AL1	EP 0	259 149 A2	03/09/1988	Europe				Ye
	AM1	EP 0	425 082 A1	05/02/1991	Europe				Ye N
	AN1	wo	92/11291 A1	07/09/1992	WIPO				Υ <u>ε</u> Υ <u>ε</u>
	AO1	wo	94/06472 A1	03/31/1994	WIPO			×	Ye
	AP1	wo	94/15585 A1	07/21/1994	WIPO	t Bagas, etc.			N
	AR	1	Baba, T. W.,	et al., "Pathoger	nicity of Live, Attenuated SIV A  5), American Association for the	After Mucosal Inf	ection of Neonat	al Macaques,	"
	AS	1	Bachmann, N presentation Verlagsgesel	to CD8+ cytotox	dritic cells process exogenous ic T lymphocytes," <i>Eur. J. Imn</i>	s viral proteins a nunol. 26:2595-2	nd virus-like part 2600 (1996), VCH	icles for class I	i I
	АТ	1	Bachmann, N serotype form	I. F. and Zinkerr nation," <i>Immunol</i>	nagel, R. M., "The influence of 1. <i>Today 17</i> :553-558 (1996), E	virus structure d Isevier Science	on antibody respo Ltd.	onses and vire	JS
XAMINER		<u> </u>				DATE	CONSIDERED		

			Page 2 of 25
	ATTY. DOCKET NO. 1700.0030003/JAG/BJD/SJE	APPLICATION NO. 10/733,582	
FORM PTO-1449	FIRST NAMED INVENTOR		
	Renner et al.		
INFORMATION DISCLOSURE STATEMENT	FILING DATE	ART UNIT	
	December 12, 2003	1614	

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA2	4,722,840	02/02/1988	Valenzuela et al.	424	88	09/19/1985
	AB2	5,698,424	12/16/1997	Mastico et al.	435	172.3	01/03/1995
<del></del>	AC2	5,143,726	09/01/1992	Thornton et al.	424	88	11/20/1989
	AD2						
	AE2						
	AF2						
	AG2						
	AH2						
	Al2						
•	AJ2						
	AK2						
			EOPEIG	N PATENT DOCUMEN	NTS	<u> </u>	
XAMINER							
NITIAL		DOCUMEN NUMBER	IT DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL2	WO 96/0529	93 A1 02/22/1996	WIPO			Ye N
	AM2	WO 96/305	23 A2 10/03/1996	WIPO			Yes No Yes No Yes
	AN2	WO 98/156	31 A1 04/16/1998				
		WO 99/409;	34 A1 08/19/1999	WIPO			
							Ye
	AP2				nont Pages etc		N N
		WO 98/1563 WO 99/4093 EP 0 465 08 OTH	31 A1 04/16/1998 34 A1 08/19/1999 31 B1 01/08/1992 IER (Including Au	WIPO WIPO Europe thor, Title, Date, Perti		•	Rev. Immuno
	AS	Boriso 2 Hepat	ova, G., <i>et al.</i> , "Hybrid itis B Virus Surface Ar	Hepatitis B Virus Nucleoca htigen," <i>J. Virol.</i> 67:3696-37	psid Bearing an Imr 701 (1993), America	nunodominant Ron n Society for Mic	egion from robiology
	АТ	2 Cesar Publis	eni, G., "Peptide displ hers B.V.	ay on filamentous phage ca	apsids," <i>FEBS Lett</i> .	3 <i>07</i> :66-70 (1992 <sub>)</sub>	), Elsevier Scien

		·	Page 3 of 25
	ATTY. DOCKET NO. 1700.0030003/JAG/BJD/SJE	APPLICATION NO. 10/733,582	
FORM PTO-1449	FIRST NAMED INVENTOR		
	Renner et al.		
INFORMATION DISCLOSURE STATEMENT	FILING DATE	ART UNIT	
	December 12, 2003	1614	

				U.S. PA	TENT DOCUMENTS			
EXAMINER INITIAL		DOCU	JMENT BER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA3				. "			
	AB3							
	AC3							
	AD3							
	AE3							-
	AF3							
	AG3							
	AH3							
	Al3							
	AJ3							
-	AK3							
	l	!		FORFIGN	PATENT DOCUMENTS			1
EXAMINER INITIAL			CUMENT MBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL3	wo	97/31948 A1	09/04/1997	WIPO	:		Yes No
	AM3	wo	99/07839 A2	02/18/1999	WIPO			Yes No
	AN3	wo	99/67293 A1	12/29/1999	WIPO			Yes No
×	AO3	EP 0	385 610 A1	09/05/1990	Europe			Yes No
								Yes
	AP3		OTHER /I	ncluding Auth	or, Title, Date, Pertinen	t Pages, etc.)		No.
	AR	<u>3</u>	Clark, H. F.,	et al., "Comparati	ve Characterization of a C-Ty era russelli," J. Natl. Cancer I	pe Virus-Produc	ing Cell Line (V (1973), Oxford U	SW) and a Virus- Iniversity Press
	AS	3	Connor, R. I., et al., "Immunological and Virological Analyses of Persons Infected by Humar Immunodeficiency Virus Type 1 while Participating in Trials of Recombinant gp120 Subunit Virol. 72:1552-1576 (February 1998), American Society for Microbiology					
	AT	3	Crameri, R. and Suter, M., "Display of biologically active proteins on the surface of filamentous phages: a cDNA cloning system for selection of functional gene products linked to the genetic information responsit for their production," <i>Gene 137</i> :69-75 (1993), Elsevier Science Publishers B.V.					
EXAMINER		•	<u> </u>			DATE	CONSIDERED	
				her or not citation in the heart communication i	s in conformance with MPEP 6 tion to Applicant.	09. Draw line thro	ough citation if no	t in conformance

273722\_1.DOC SKGF Rev. 12/03/03

X Only FOR received

		Page 4 of 25
	ATTY. DOCKET NO. 1700.0030003/JAG/BJD/SJE	APPLICATION NO. 10/733,582
FORM PTO-1449	FIRST NAMED INVENTOR	
	Renner et al.	
INFORMATION DISCLOSURE STATEMENT	FILING DATE	ART UNIT
	December 12, 2003	1614

-				U.S. PA	TENT DOCUMENTS			
EXAMINER			JMENT	DATE	NIANAT	CLASS	CUD CLASS	EILING DATE
INITIAL	AA4	NUME	SER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AB4							
	AC4							
	AD4							
	AE4	_						
	AF4							Í
	AG4							
	AH4							
	Al4							
	AJ4					-		
	AK4							
				FOREIGN	PATENT DOCUMENTS		<u> </u>	1
EXAMINER INITIAL			UMENT IBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
11111111	AL4	1,101	IDEN	DATE	00011111	02,00	000 00 100	Yes
						· ·		Yes
	AM4		· <u> </u>					No Yes
	AN4							No Yes
	AO4							No Yes
	AP4		OTHER (I	actuding Auth	or, Title, Date, Pertinent P	Pages etc.)		No No
	1		OTHER (II	icidaling Auth	or, Title, Date, Pertinent F	ages, etc.)		
	AR	4	Daniel, M. D. Science 258:	, <i>et al.</i> , "Protectiv 1938-1941 (1992	e Effects of a Live Attenuated SI ), American Association for the <i>i</i>	V Vaccine wit Advancement	h a Deletion in t of Science	ne <i>nef</i> Gene,"
	AS	4	Davis, N. L., o Clone: Analys	et al., "In Vitro Sy sis of a Viable De	nthesis of Infectious Venezuelar letion Mutant," <i>Virology 171</i> :189	n Equine Ence -204 (1989), <i>F</i>	phalitis Virus RI Academic Press	NA from a cDNA Inc.
	АТ	<u>4</u>	Engineered F	le la Cruz, V. F., et al., "Immunogenicity and Epitope Mapping of Foreign Sequences via Genetically Engineered Filamentous Phage," <i>J. Biol. Chem. 263</i> :4318-4322 (1988), The American Society for Biochemistry and Molecular Biology Inc.				
EXAMINER	I	I				DATE	CONSIDERED	

			Page 5 of 25
FORM PTO-1449	ATTY. DOCKET NO. 1700.0030003/JAG/BJD/SJE FIRST NAMED INVENTOR	APPLICATION NO. 10/733,582	
TOTAVIT TO 1743	Renner et al.		
INFORMATION DISCLOSURE STATEMENT	FILING DATE	ART UNIT	

				U.S. P	ATENT DOCUMENTS			
EXAMINER INITIAL		DOCU	JMENT BER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA5							
	AB5							
	AC5		· · · · · · · · · · · · · · · · · · ·					
	AD5							
	AE5						-	
	AF5						· ·	<u> </u>
	AG5							
	AH5							
	Al5							
	AJ5							+
	AK5			•			-	
		<u></u>			   PATENT DOCUMENTS			
EXAMINER	T		CUMENT					
INITIAL		NUN	/BER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION Yes
·	AL5							No
	AM5							Yes No
	AN5							Yes No
	AO5							Yes No
	AP5							Yes No
	JAF5		OTHER (	Including Aut	hor, Title, Date, Pertiner	nt Pages, etc.)	l	110
	AR	<u>5</u>	Donnelly, J.	J., et al., "DNA \	/accines," Annu. Rev. Immuno	ol. 15:617-648 (A <sub>l</sub>	oril 1997), Annua	al Reviews Inc.
	AS	<u>5</u>			etitive Antigen Patterns for Ind 997), The Rockefeller Univers		ies Against Antib	odies," <i>J. Exp</i> .
	АТ	<u>5</u>	the same po	tency to release	nd recombinant enzymatically histamine from basophils in p (5), Mosby-Year Book, Inc.	atients with Hyme	enoptera allergy,	spholipase A₂ has " <i>J. Allergy Clin.</i>
EXAMINER						DATE	CONSIDERED	
					is in conformance with MPEP 6 ation to Applicant.	609. Draw line thre	ough citation if no	t in conformance

•		Page 6 o	f 25
	ATTY, DOCKET NO.	APPLICATION NO.	
	1700.0030003/JAG/BJD/SJE	10/733,582	
FORM PTO-1449	FIRST NAMED INVENTOR		
101111111111111111111111111111111111111			
	Renner et al.		
INFORMATION DISCLOSURE STATEMENT	FILING DATE	ART UNIT	
	December 12, 2003	1614	

				U.S. PA	ATENT DOCUMENTS			
EXAMINER INITIAL		DOCU	JMENT	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
INITIAL	AA6	IVOIVIE	JEIN	DATE	TV/AVIL	02.00	000 00 100	THEM OF THE
	AB6							
	AC6							
	AD6			<del>-</del>				
	AE6							
	AF6							
	AG6							
	AH6	-						
	Al6							
	AJ6							
i								
	AK6							
		1		FOREIGN	PATENT DOCUMENTS	- <del></del>	1	
EXAMINER INITIAL			CUMENT MBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL6							Yes No
	AM6							Yes No
								Yes
	AN6							No Yes
	AO6							No Yes
	AP6		OTHER (I	noluding Auth	or, Title, Date, Pertinent I	Pages etc.)		No
	1		OTHER (II	ncluaing Autr	ior, Title, Date, Pertinent i	ages, etc.		
	AR	<u>6</u>		y for Daunomycii	eparation Method of Immunogen n and Adriamycin," <i>J. Immunol. I</i>			
	AS	<u>6</u>	Gilbert, S. C. 15:1280-128	, <i>et al.</i> , "A proteir 4 (November 199	n particle vaccine containing mul 97), Nature Publishing Group	tiple malaria e	pitomes," <i>Nature</i>	e Biotechnol.
	AT	<u>6</u>	oncoprotein i	H. L., et al., "Chi n an HPV16 tum demy of Science	meric papillomavirus virus-like p or model," <i>Proc. Natl. Acad. Sci.</i> s	articles elicit a USA 95:1800	ntitumor immuni 0-1805 (February	ty against the E7 1998), The
EXAMINER	1	<u> </u>		<u> </u>		DATE	CONSIDERED	

Page	7	of	25

#### FORM PTO-1449

### INFORMATION DISCLOSURE STATEMENT

П	ATTY. DOCKET NO. 1700.0030003/JAG/BJD/SJE	APPLICATION NO. 10/733,582
ļ	FIRST NAMED INVENTOR	
i	Renner et al.	
	FILING DATE	ART UNIT
İ	December 12, 2003	1614

				U.S. PA	TENT DOCUMENTS			
EXAMINER			JMENT	DATE	NANAE	CLASS	SUB CLASS	EILING DATE
INITIAL	AA7	NUME	BER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
-	<b>AD7</b>							
	AB7					:		
	AC7							
	AD7							
	AE7							
	AF7							
	AG7	-						
	AH7	<u> </u>						
	AI7							
:	AJ7							
	AK7							
			L	FOREIGN	PATENT DOCUMENTS		I	1
EXAMINER			UMENT					
INITIAL		NUM	1BER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION Yes
-	AL7							No
	AM7							Yes No
	AN7							Yes No
	A07							Yes No
	AP7					·		Yes No
			OTHER (II	ncluding Auth	or, Title, Date, Pertinent P	ages, etc.)		
	AR	7	Hahn, C. S., presentation,	et al., "Infectious " Proc. Natl. Acad	Sindbis virus transient expressic d. Sci. USA 89:2679-2683 (1992	on vectors for s ), National Aca	studying antigen ademy Press	processing and
	AS	7	Harding, C. V. and Song, R., "Phagocytic Processing of Exogenous Particulate Antigens by Macrophages for Presentation by Class I MHC Molecules," <i>J. Immunol.</i> 153:4925-4933 (1994), The American Association of Immunologists					
	Hilleman, M. R., "Six decades of vaccine development—a personal history," <i>Nature Med. Vaccine Suppl.</i> 4:507-514 (May 1998), Nature Publishing Group							ccine Suppl.
EXAMINER	·		·			DATE (	CONSIDERED	-
					s in conformance with MPEP 609.	Draw line thro	ugh citation if not	in conformance
and not considere	a. Includ	е сору	of this form with	h next communica	tion to Applicant.			

			Page 8 of 25
FORM PTO-1449	ATTY. DOCKET NO. 1700.0030003/JAG/BJD/SJE FIRST NAMED INVENTOR	APPLICATION NO. 10/733,582	
W. T. O. D. A. T. O. J. D. O. J. D. T. O. T. A. T. D. J. D. T. A. T. D. J. D. T. D.	Renner et al.		
INFORMATION DISCLOSURE STATEMENT	FILING DATE	ART UNIT	

[				U.S. PA	TENT DOCUMENTS			
EXAMINER		DOCU	JMENT	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
INITIAL	AA8	NOME	DEK	DATE	INAIVIE	CLASS	SUB-CLASS	FILING DATE
	AB8					1		
	AC			<del> </del>		1		
	AD8							
	AE8							
	AF8							
	AG8				,			
	AH8							
	Al8							
	AJ8							1
	AK8							
				EODEIGN	PATENT DOCUMENTS			
EXAMINER	Т	IDOC	UMENT	FOREIGN	PATENT DOCUMENTS	<del>-  </del>		
INITIAL			MBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION Yes
	AL8							No
	AM8							Yes No
	AN8							Yes No
	AO8							Yes No
								Yes
	AP8		OTHER (	Including Auth	or, Title, Date, Pertinent l	 Pages, etc.)		No
	lannolo, G., et al., "Construction, Exploitation and Evolution of a New Peptide Library Displayed at High Density by Fusion to the Major Coat Protein of Filamentous Phage," Biol. Chem. 378:517-521 (June 1997), Walter de Gruyter & Company							
	AS	8	Iannolo, G., et al., "Modifying Filamentous Phage Capsid: Limits in the Size of the Major Capsid Protein," Mol. Biol. 248:835-844 (1995), Academic Press Limited					
	АТ	AT  B  Jiang, X., et al., "Norwalk Virus Genome Cloning and Characterization," Science 250:1580-1583 (1990), American Association for the Advancement of Science						
EXAMINER						DATE	CONSIDERED	
					is in conformance with MPEP 609	. Draw line thre	ough citation if no	t in conformance
				ther or not citation ith next communication		Draw line three	ough citation if no	t in conformance

		Page 9 of 25	
	ATTY. DOCKET NO. 1700.0030003/JAG/BJD/SJE	APPLICATION NO. 10/733,582	
FORM PTO-1449	FIRST NAMED INVENTOR		
	Renner et al.		
INFORMATION DISCLOSURE STATEMENT	FILING DATE	ART UNIT	
	December 12, 2003	1614	

	U.S. PATENT DOCUMENTS								
EXAMINER			JMENT						
INITIAL		NUME	BER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE	
	AA9								
	AB9				,				
	AC9			· · · · · · · · · · · · · · · · · · ·					
	AD9								
	AE9								
	AF9								
	AG9								
	AH9						<u> </u>		
	Al9								
	AJ9								
	AK9								
	ANS				DATENT BOOMENTS				
EVALUNED		1500	NI IN ACTUAL	FOREIGN	PATENT DOCUMENTS	1			
EXAMINER INITIAL			UMENT MBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION	
	AL9							Yes No	
	AM9							Yes No	
	AN9							Yes No	
	AO9							Yes No	
		<u> </u>						Yes	
	AP9		OTHER (	 Including Auth	or, Title, Date, Pertinent F	Pages, etc.)	l	No	
	1	1	OTTILIX (I	noluding Add	or, Title, Date, Fertinelit i	ages, etc./			
	AR	9	Kovacsovics exogenous a National Aca	antigen upon phac	et al., "Efficient major histocompa gocytosis by macrophage," <i>Proc</i>	atibility comple . <i>Natl. Acad</i> . S	ex class I presen cci. USA 90:4942	tation of 2-4946 (1993),	
	AS	9	Kratz, P. A., capsids," Pro	et al., "Native dis oc. Natl. Acad. Sc	play of complete foreign protein i. USA 96:1915-1920 (March 19	domains on th 99), National A	e surface of hep Academy Press	atitis B virus	
	AT  2  Landschulz, W. H., et al., "The Leucine Zipper: A Hypothetical Structure Common to a New Class of DNA Binding Proteins," Science 240:1759-1764 (1988), American Association for the Advancement of Science							Class of DNA ent of Science	
EXAMINER						DATE	CONSIDERED		
				ther or not citation the next communication	s in conformance with MPEP 609. tion to Applicant.	Draw line thro	ough citation if no	t in conformance	
		<u>/</u>							

		Page 10	of 25
	ATTY. DOCKET NO. 1700.0030003/JAG/BJD/SJE	APPLICATION NO. 10/733,582	
FORM PTO-1449	FIRST NAMED INVENTOR Renner et al.		
INFORMATION DISCLOSURE STATEMENT	FILING DATE	ART UNIT	

			-	U.S. PA	ATENT DOCUMENTS			
EXAMINER			MENT			01.400	CUP CLASS	FILING DATE
INITIAL	AA10	NUME	BER L	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
:	AB10							
	AC10							
	AD10					1		
	AE10							
	AF10							
	AG10						-	
	AH10						_	
	Al10							
	AJ10							
	AK10							
	,							
EXAMINER	1	1000	UMENT	FOREIGN	PATENT DOCUMENTS		1	
INITIAL			BER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL10							Yes No
	ALIO							Yes
	AM10							No Yes
	AN10							No
	AO10							Yes No
								Yes
	AP10	J	OTHER (Ir	l ncluding Auth	_	_	;.)	No
	Leake, C. J., et al., "Cytopathic Effect and Plaque Formation by Arboviruses in a Continuous Cell Line (XTo 2) from the Toad Xenopus laevis," J. Gen. Virol. 35:335-339 (1977), Society for General Microbiology							
	Lee, K. H., et al., "Two-Dimensional Electrophoresis of Proteins as a Tool in the Metabolic Engineering of C Cycle Regulation," <i>Biotech. and Bioeng.</i> 50:336-340 (1996), John Wiley & Sons, Inc.							ingineering of Cell
	Liljeström, P. and Garoff, H., "A New Generation of Animal Cell Expression Vectors Based on the Semliki Forest Virus Replicon," <i>Bio/technology</i> 9:1356-1361 (1991), Nature Publishing Group							
EXAMINER	1		L			DAT	E CONSIDERED	-

		Page 11 of 25
	ATTY. DOCKET NO. 1700.0030003/JAG/BJD/SJE	APPLICATION NO. 10/733,582
FORM PTO-1449	FIRST NAMED INVENTOR	
	Renner et al.	
INFORMATION DISCLOSURE STATEMENT	FILING DATE	ART UNIT
	December 12, 2003	1614

				II C D	ATENT DOCUMENTS			
EXAMINER		DOCI	JMENT	U.S. PA	TIENT DOCUMENTS		T	
INITIAL		NUME		DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA11	•						
	AB11							
-	AC11							
	AD11					-		
	AE11							
	AF11				-			
	AG11							
	AH11							
	Al11			<del></del>				
	ĀJ11							_
	AK11							
				FOREIGN	PATENT DOCUMENTS			
EXAMINER INITIAL			CUMENT MBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
								Yes
	AL11							No Yes
	AM11							No
		1	-					Yes
	AN11							No Yes
	AO11							No
								Yes
	AP11		OTHER (	noluding Auti	hor, Title, Date, Pertinent	Pages etc.)	1	No
			OTHER (I	ncluding Auti	ior, Title, Date, Pertinent	rages, etc.,		
	AR	<u>11</u>	Liljeström, P	., "Alphavirus exp	oression systems," <i>Curr. Opin. E</i>	Biotech. 5:495-	500 (1994), Curr	ent Biology Ltd
	AS	11	carrier to elic	<i>et al.</i> , "A recombi cit a polarized Th Y-VCH Verlag G	inant virus-like particle system d 1 immune response without adju mbH	lerived from pa uvant," <i>Eur. J.</i>	rvovirus as an ef Immunol. 28:140	ficient antigen 1-1407 (April
	López, O., et al., "Direct formation of mixed micelles in the solubilization of phospholipid liposomes by Triton X-100," FEBS Lett. 426:314-318 (April 1998), Elsevier Science B.V. for Federation of European Biochemical Societies.							somes by Triton an Biochemical
EXAMINER		l				DATE	CONSIDERED	

		Page 12 of 25
ATTY. DOCKET NO. 1700.0030003/JAG/BJD/SJE	APPLICATION NO. 10/733,582	_
FIRST NAMED INVENTOR		
Renner et al.		
FILING DATE	ART UNIT	_
December 12, 2003	1614	

# FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT

EXAMINER   DOCUMENT   NUMBER   DATE   NAME   CLASS   SUB-CLASS   FILING	DATE
	DATE
AB12	
AC12	
AD12	
AE12	
AF12	
AG12	i
AH12	
Al12	
AJ12	
AK12	
FOREIGN PATENT DOCUMENTS	
EXAMINER DOCUMENT   CLASS SUB-CLASS TRANSLA	TION
AL12	Yes
	No Yes
AM12	No Yes
AN12	No Yes
AO12	No
AP12	Yes No
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)	
AR 12 Lundstrom, K., "Alphaviruses as expression vectors," Curr. Opin. Biotech. 8:578-582 (October 1997), C	urrent
AS  Matsui, S. M., et al., "The Isolation and Characterization of a Norwalk Virus-specific cDNA," J. Clin. Investigation Inc.  87:1456-1461 (1991), American Society for Clinical Investigation Inc.	est.
AT 12 Minenkova, O. O., et al., "Design of specific immunogens using filamentous phage as the carrier," General 128:85-88 (1993), Elsevier Science Publishers B.V.	)
EXAMINER DATE CONSIDERED	
<b>EXAMINER:</b> Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformand not considered. Include copy of this form with next communication to Applicant.	ance

•		Page 13 of 2	:5
	ATTY. DOCKET NO. 1700.0030003/JAG/BJD/SJE	APPLICATION NO. 10/733,582	
FORM PTO-1449	FIRST NAMED INVENTOR		_
	Renner et al.		
INFORMATION DISCLOSURE STATEMENT	FILING DATE	ART UNIT	
	December 12, 2003	1614	

				U.S. P	ATENT DOCUMENTS			
EXAMINER			JMENT	DATE	1,,,,,,,,	01.400	0110 01 400	EII ING DATE
INITIAL	AA13	NUME	BER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AB13							_
	AC13							
	AD13							
	AE13							
	AF13							
	AG13							
	AH13							-
<del> </del>	Al13							
	AJ13							
	AK13							
	AKIS							
=>/		Too	NI INTERIOR	FOREIGI	N PATENT DOCUMENTS		·	·-
EXAMINER INITIAL			CUMENT MBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
			·					Yes
	AL13	-						No Yes
	AM13	1	- 1-1-1 W.					No_
	AN13							Yes No
·		1						Yes
	AO13	ļ						No Yes
	AP13							No
			OTHER (I	ncluding Aut	thor, Title, Date, Pertinent	Pages, etc.	)	
	AR	<u>13</u>	Morein, B., e viruses," <i>Na</i> i	et al., "Iscom, a r ture 308:457-46	novel structure for antigenic pres 0 (1984), Nature Publishing Grou	entation of me	mbrane proteins	from enveloped
	AS	<u>13</u>	Neurath, A. I Attached Hy	R., <i>et al</i> ., "Hepat drophobic Tail,"	iitis B Virus Surface Antigen (HB <i>Mol. Immunol.</i> 26:53-62 (1989),	sAg) As Carrie Pergamon Pre	er for Synthetic Pess	eptides Having An
	AT	<u>13</u>	O'Shea, E. k (1992), Cell	K., <i>et al</i> ., "Mecha Press	nism of Specificity in the Fos-Ju	n Oncoprotein	Heterodimer," C	ell 68:699-708
EXAMINER	1		]			DATE	CONSIDERED	

<del>-,-,-,-,-,-,-,-,-,-,-,-,-,-,-,-,-,-,-,</del>			Page 14 of 25
	ATTY. DOCKET NO. 1700.0030003/JAG/BJD/SJE	APPLICATION NO. 10/733,582	
FORM PTO-1449	FIRST NAMED INVENTOR		
	Renner et al.		
INFORMATION DISCLOSURE STATEMENT	FILING DATE	ART UNIT	
	December 12, 2003	1 1614	

				U.S. PA	ATENT DOCUMENTS	<u>.</u>			
EXAMINER			JMENT	DATE	114145	01.400	0112 01 400	EII ING DATE	
INITIAL	AA14	NUME	BER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE	
								-	
	AB14								
	AC14								
	AD14								
	AE14								
	AF14	-							
	AG14			= =.			<del>-</del>		
	AH14						1		
	Al14								
	AJ14								
	AK14								
:				FORFIGN	PATENT DOCUMENTS	<u> </u>		!	
EXAMINER		DOC	CUMENT	IOREIOR	TATERT DOGGINERTO				
INITIAL		NUN	/IBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION Yes	
	AL14							No	
	AM14							Yes No	
·	AN14				·			Yes No	
	AO14							Yes No	
	AP14							Yes No	
			OTHER (I	ncluding Auth	or, Title, Date, Pertinent	Pages, etc.)			
,	AR	<u>14</u>	Microbiol. Re	Perham, R. N., et al., "Engineering a peptide epitope display system on filamentous bacteriophage," FEMS Microbiol. Rev. 17:25-31 (1995), Elsevier Science Publishers on behalf of the Federation of European Microbiological Societies					
	AS	<u>14</u>	Petrenko, V. Oxford Unive	Petrenko, V. A., <i>et al.</i> , "A library of organic landscapes on filamentous phage," <i>Protein Eng.</i> 9:797-801 (1996), Oxford University Press					
	AT	14	basis for dev	Pumpens, P. and Grens, E., "Hepatitis B core particles as a universal display model: a structure-function pasis for development," <i>FEBS Lett. 442</i> :1-6 (January 1999), Elsevier Science B.V., for Federation of European Biochemical Societies.					
EXAMINER	<u></u>		L			DATE	CONSIDERED		

Page	15	of	25

#### **FORM PTO-1449**

## **INFORMATION DISCLOSURE STATEMENT**

ATTY. DOCKET NO. 1700.0030003/JAG/BJD/SJE	APPLICATION NO. 10/733,582	
FIRST NAMED INVENTOR		
Renner et al.		
FILING DATE	ART UNIT	
December 12, 2003	1614	

				U.S. PA	TENT DOCUMENTS		· · · · · · · · · · · · · · · · · · ·	
EXAMINER			MENT					
INITIAL	À A 4 E	NUME	BER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA15							
	AB15							
	AC15			***************************************				
	AD15							
	AE15							
	AF15			<del></del>				<u> </u>
	AG15							
	AH15							
	Al15							
	AJ15							
	AK15							
				FOREIGN	PATENT DOCUMENTS			
EXAMINER INITIAL			UMENT IBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
INITIAL	1115	INOIV	IDLIX	DAIL	COOMIN	CLASS	GOD-CLASS	Yes
	AL15							No Yes
	AM15							No Yes
	AN15							No Yes
	AO15							No
	AP15							Yes No
	17.11_10	-l	OTHER (In	ncluding Auth	or, Title, Date, Pertinent	Pages, etc.)		
	AR	<u>15</u>	Raychaudhur Biotechnol. 1	i, S. and Rock, K 6:1025-1031 (No	. L., "Fully mobilizing host defevented and the control of the con	ense: Building b a Inc.	etter vaccines,"	Nature
Ü	AS	<u>15</u>	Redfield, R. F Disease," <i>N</i> .	Redfield, R. R., et al., "Dissminated Vaccinia in a Military Recruit with Human Immunodeficiency Virus (HIV) Disease," N. Eng. J. Med. 316:673-676 (1987), Massachusetts Medical Society.				
	AT	<u>15</u>	Attachment o	Renner, W. A., et al., "Recombinant Cyclin E Expression Activates Proliferation and Obviates Surface Attachment of Chinese Hamster Ovary (CHO) Cells in Protein-Free Medium," <i>Biotech. Bioeng. 47</i> :476-482 (1995), John Wiley & Sons Inc.				
EXAMINER	<u> –                                 </u>				· · · · · · · · · · · · · · · · · · ·	DATE	CONSIDERED	
					s in conformance with MPEP 609	9. Draw line thre	ough citation if no	t in conformance
				n next communica				

		Page 16 of 25
	ATTY. DOCKET NO. 1700.0030003/JAG/BJD/SJE	APPLICATION NO. 10/733,582
FORM PTO-1449	FIRST NAMED INVENTOR	
	Renner et al.	
INFORMATION DISCLOSURE STATEMENT	FILING DATE	ART UNIT
	December 12, 2003	1614

				U.S. P.	ATENT DOCUMENTS	_		
EXAMINER			JMENT					
INITIAL	AA16	NUME	BER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AAIO							
	AB16							
	AC16			****				
	AD16							
	AE16							
	AF16							
	AG16			•				
	AH16							
	Al16			<del></del>				
	AJ16							
	AK16							
	/							
EXAMINER		1000	CUMENT	FOREIGN	PATENT DOCUMENTS	1		
INITIAL		1	MBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL16							Yes No
- III								Yes
	AM16	+				-		No Yes
	AN16							No
	AO16	ŀ						Yes No
	AP16							Yes No
	I AF 10	.1	OTHER (I	ncluding Autl	hor, Title, Date, Pertinent	Pages, etc.	)	140
	AR	<u>16</u>	Romagnani,	S., "The Th1/Th2	2 paradigm," <i>Immunol. Today</i> 1	18:263-266 (Jun	e 1997), Elsevie	r-Science Ltd
	AS	<u>16</u>	Schlesinger, Elsevier Scie	S., Alphaviruses ence Publishers I	- vectors for the expression of td. (UK).	heterologous g	enes," <i>TIBTECH</i>	/ 11:18-22 (1993),
	АТ	<u>16</u>	exogenous a	t al., "Recombina intigen to elicit pi National Academ	nt parvovirus-like particles as a rotective antiviral cyctotoxic T c by of Sciences	an antigen carrie ells," <i>Proc. Nati</i>	er: A novel nonre l. Acad. Sci. USA	plicative 1 94:7503-7508
EXAMINER			L			DATE	CONSIDERED	

 		Page 17 of 25
	ATTY. DOCKET NO. 1700.0030003/JAG/BJD/SJE	APPLICATION NO. 10/733,582
FORM PTO-1449	FIRST NAMED INVENTOR	
	Renner et al.	
INFORMATION DISCLOSURE STATEMENT	FILING DATE	ART UNIT
	December 12, 2003	1614

			<u> </u>	U.S. PA	TENT DOCUMENTS			
EXAMINER			JMENT	DATE	N1AA47	01.400	0115 01 400	EII INO DATE
INITIAL	AA17	NUME	SER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AB17	-				Ì	<u> </u>	
	AC17							
	AD17							
	AE17			<del></del>				
	AF17							
	AG17							
	AH1							
	Al17							
	AJ17							
	AK17							
			<u> </u>	FORFICN	DATENT DOCUMENTS			
EXAMINER	Τ	DOC	CUMENT	FOREIGN	PATENT DOCUMENTS	1		
INITIAL			MBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL17							Yes No
	AM17							Yes No
	AN17							Yes No
								Yes
	AO17	+						No Yes
	AP17		OTHER (I	cluding Auth	or, Title, Date, Pertinent P	Pages etc.)	<u> </u>	No
			•					
	AR	<u>17</u>			Virus Vaccine-Induced SIV-Spe a Association for the Advanceme			ocytes," <i>Scienc</i> e
	AS	<u>17</u>	Stollar, V., "T Schlesinger,	Stollar, V., "Togaviruses in Cultured Arthropod Cells," in <i>The Togaviruses: Biology, Structure, Replication</i> , Schlesinger, R. W. (ed.), Academic Press, New York, NY, pp. 612-615 (1980)				
	AT	<u>17</u>	Strauss, J. H. Microbiol. Re	Strauss, J. H. and Strauss, E. G., "The Alphaviruses: Gene Expression, Replication, and Evolution," Microbiol. Rev. 58:491-562 (1994), American Society for Microbiology				
EXAMINER			<u> </u>			DATE	CONSIDERED	
EXAMINER: Initi	al if refere	ence co	nsidered, wheth	ner or not citation i	s in conformance with MPEP 609.	Draw line thro	ough citation if not	in conformance
and not considere	sa. includ	e copy	or this torm with	h next communica	tion to Applicant.			

		Page 18 of 25
•	ATTY. DOCKET NO. 1700.0030003/JAG/BJD/SJE	APPLICATION NO. 10/733,582
FORM PTO-1449	FIRST NAMED INVENTOR	
	Renner et al.	
INFORMATION DISCLOSURE STATEMENT	FILING DATE	ART UNIT
	December 12, 2003	1614

				U.S. P	ATENT DOCUMENTS			
EXAMINER			JMENT			CLASS	CUR CLASS	FILING DATE
INITIAL	AA18	NUM	3EK	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AB18							
	AC18							
	AD18							
	AE18							
	AF18							
	AG18							
	AH18							
	Al18							
	AJ18							
	AK18					+		
			L	FOREIGN	PATENT DOCUMENTS			
EXAMINER INITIAL			CUMENT MBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL18							Yes No
					-			Yes
	AM18							No Yes
	AN18	-	•• ••					No Yes
	AO18							No
	AP18							Yes No
			OTHER (I	ncluding Aut	hor, Title, Date, Pertinent	Pages, etc.)		
	AR	<u>18</u>	Tanimori, H., <i>Dyn. 4</i> :812-8	. <i>et al</i> ., "Enzyme 19 (1981), Blacl	Immunoassay of Neocarzinosta well Publishing, Inc.	tin Using ∃-Ga	lactosidase as L	abel," <i>J. Pharm</i> .
	AS	Topchieva, I. and Karezin, K., "Self-Assembled Supramolecular Micellar Structures Based on Non-i Surfactants and Cyclodextrins," <i>J. Colloid Interface Sci. 213</i> :29-35 (May 1999), Academic Press						
	Townsend, A. and Bodmer, H., "Antigen Recognition by Class I-Restricted T Lymphocytes," <i>Ann. Rev. Immunol.</i> 7:601-624 (1989), Annual Reviews Inc.						Ann. Rev.	
EXAMINER	1		<u> </u>			DATE	CONSIDERED	

		Page 19 of 25
ATTY. DOCKET NO. 1700.0030003/JAG/BJD/SJE	APPLICATION NO. 10/733,582	
FIRST NAMED INVENTOR Renner et al.		
FILING DATE December 12, 2003	ART UNIT 1614	

# FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT

				U.S. PA	ATENT DOCUMENTS				
EXAMINER INITIAL		DOC NUM	UMENT	DATE	NAME	01.400	0110 01 400		
INITIAL	AA19	NOM	DER	DATE	NAME_	CLASS	SUB-CLASS	FILING DATE	
	AB19								
	AC19								
	AD19								
	AE19			· <del></del>			<del>                                     </del>		
	AF19								
	AG19			<del></del>					
	AH19		-		_				
	Al19					<u> </u>		_	
	AJ19	_							
	AK19								
EXAMINER	<del></del>	T DO	DI INSCRIT	FOREIGN	PATENT DOCUMENTS				
INITIAL			CUMENT MBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION	
	AL19							Yes No	
	AM19							Yes	
								No Yes	
	AN19							No Yes	
	AO19	-						No No	
	AP19				<u></u>			Yes No	
	1	· ·	OTHER (I	ncluding Auth	or, Title, Date, Pertinent P	ages, etc.)	-		
	Twomey, T., et al., "Structure and immunogenicity of experimental foot-and-mouth disease and polior vaccines," <i>Vaccine 13</i> :1603-1610 (1995), Elsevier Science Ltd.								
	AS	Ulrich, R., et al., "Core Particles of Hepatitis B Virus as Carrier for Foreign Epitopes," Adv. in Virus Res. 50:141-182 (January 1998), Academic Press							
	VanCott, T. C., et al., "Antibodies with Specificity to Native gp120 and Neutralization Activity against Prima Human Immunodeficiency Virus Type 1 Isolates Elicited by Immunization with Oligomeric gp160," J. Virol. 71:4319-4330 (June 1997), American Society for Microbiology							against Primary 160," <i>J. Virol</i> .	
EXAMINER						DATE (	CONSIDERED		
EXAMINER: Init	ial if refere	ence co	nsidered, wheth	ner or not citation is	s in conformance with MPEP 609.	Draw line thro	ugh citation if no	t in conformance	
and not consider	eu. muuc	e copy	OF BIRS TOTAL WILL	u next communica	пот то Аррисапт.			ľ	

 		Page 20 of	25
	ATTY. DOCKET NO. 1700.0030003/JAG/BJD/SJE	APPLICATION NO. 10/733,582	<del></del>
FORM PTO-1449	FIRST NAMED INVENTOR		
	Renner et al.		
INFORMATION DISCLOSURE STATEMENT	FILING DATE	ART UNIT	
	December 12, 2003	1614	

		_		U.S	. PATENT DOCUMEN	ITS		
EXAMINER INITIAL		DOCU	JMENT BER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA20		_					
	AB20							
	AC20							
	AD20			-				
	AE20							
	AF20							
	AG20			<del>- </del>				
	AH20							
	Al20			-				
	AJ20							
-	AK20							
				FORE	IGN PATENT DOCUM	MENTS		
EXAMINER INITIAL			CUMENT MBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL20							Yes No
	AM20	1						Yes No
			<u> </u>	-				Yes No
	AN20					:		Yes
	AO20							No Yes
	AP20		OTHER	(Including	Author, Title, Date, Po	ertinent Pages, etc.	<u> </u>	No.
	AR	<u>20</u>	Warnes, A	et al., "Expre	ession of the measles virus res," <i>Gene 160</i> :173-178 (*	s nucleoprotein gene in	Escherichia coli a	nd assembly of
	Watson, E., et al., "Structure determination of the intact major sialylated oligosaccharide chains of recombinant human erythropoietin expressed in Chinese hamster ovary cells," Glycobiology 4:227-237 (1994), Oxford University Press							nins of 4:227-237
	АТ	20	Xiong, C., Science 2	<i>et al.</i> , "Sindbis <i>43</i> :1188-1191	Virus: An Efficient, Broad (1989), The American Ass	Host Range Vector for ociation for the Advance	Gene Expression ement of Science	in Animal Cells,"
EXAMINER						DATE	CONSIDERED	

			Page 21 of 25
	ATTY. DOCKET NO. 1700.0030003/JAG/BJD/SJE	APPLICATION NO. 10/733,582	
FORM PTO-1449	FIRST NAMED INVENTOR		
	Renner et al.		
INFORMATION DISCLOSURE STATEMENT	FILING DATE	ART UNIT	
	Docombor 12, 2002	1614	

				U.S. PA	ATENT DOCUMENTS			
EXAMINER INITIAL		DOCU	JMENT	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
HALL	AA21	TVOIVIL	<u> </u>	DATE	INAINE	CLAGO	OOD-OD-OO	TIEMO BITTE
	AB21							
	AC21							
	AD21							
					· · · · · · · · · · · · · · · · · · ·			
	AE21							
	AF21							
- 18	AG21							
	AH21							-
	Al21							
	AJ21		-					
	AK21		-					
				EODEIGN	PATENT DOCUMENTS		<u>.</u>	
EXAMINER			CUMENT					
INITIAL		NUN	/IBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION Yes
	AL21_	<u> </u>			1			No Yes
	AM21							No
	AN21							Yes No
	AO21							Yes No
	AP21							Yes No
	17121		OTHER (I	ncluding Auth	or, Title, Date, Pertinen	t Pages, etc.)		140
	Zang, M., et al., "Production of Recombinant Proteins in Chinese Hamster Ovary Cells Using a Protein-Free Cell Culture Medium," Bio/technology 13:389-392 (1995), Nature Publishing Company							g a Protein-Free
	AS 21 Invitrogen Manual, "Sindbis Expression System Version E," Catalog No. K750-01, Life Technologies (April 2002)							nologies (April
	АТ	21	Boorsma, M 18:429-432 (	., <i>et al.</i> , "A tempe (April 2000), Natu	rature-regulated replicon-base re America Inc.	ed DNA expressi	on system," <i>Nat</i>	ure Biotechnol.
EXAMINER			<u> </u>			DATE	CONSIDERED	

#### **FORM PTO-1449**

## **INFORMATION DISCLOSURE STATEMENT**

ATTY. DOCKET NO. 1700.0030003/JAG/BJD/SJE	APPLICATION NO. 10/733,582	
FIRST NAMED INVENTOR		
Renner et al.		
FILING DATE	ART UNIT	
D	14044	

U.S. PATENT DOCUMENTS										
EXAMINER			JMENT							
INITIAL	1100	NUME	BER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE		
	AA22					:				
	AB22			-						
	AC22									
	AD22		-		<u> </u>					
	AE22									
	AF22			<del></del>				<del>- </del>		
	AG22						-			
	AH22									
	Al22									
	AJ22									
	AK22									
<u> </u>	i			FOREIGN	PATENT DOCUMENTS	1				
EXAMINER	1	DOC	UMENT			T				
INITIAL		NUN	IBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION		
	AL22							Yes No		
	AM22							Yes No		
	AN22		•					Yes No		
	AO22							Yes No		
		1					_	Yes		
	AP22	1	OTHER //-	 	│ or, Title, Date, Pertinent I	Pogos eta l	<u>.</u> l	No		
			OTHER (II	icidding Adm	or, Title, Date, Pertinent i	ages, etc.				
	AR	<u>22</u>	antigen peption	Esposito, G., et al., "Conformational study of a short <i>Pertussis</i> toxin T cell epitope incorporated in a multiple antigen peptide template by CD and two-dimensional NMR. Analysis of the structural effects on the activity of synthetic immunogens," <i>Eur. J. Biochem. 217</i> :171-187 (1993), Blackwell Science Ltd on behalf of the Federation of European Biochemical Societies						
	AS	<u>22</u>	Frolov, I., et a USA 93:1137	Frolov, I., et al., "Alphavirus-based expression vectors: Strategies and applications," <i>Proc. Natl. Acad. Sci. USA</i> 93:11371-11377 (1996), National Academy Press						
	АТ	22	Ebina, S., et al., "Chemical Modification of Bovine Pancreatic Trypsin Inhibitor for Single Site Coupling of Immunogenic Peptides for NMR Conformational Analysis," J. Biol. Chem. 264:7882-7888, American Society for Biochemistry and Molecular Biology, Inc. (1989).							
EXAMINER	1					DATE	CONSIDERED			

		Page 23 of 25
	ATTY. DOCKET NO. 1700.0030003/JAG/BJD/SJE	APPLICATION NO. 10/733,582
FORM PTO-1449	FIRST NAMED INVENTOR	
•	Renner et al.	
INFORMATION DISCLOSURE STATEMENT	FILING DATE	ART UNIT
•	December 12, 2003	1614

	U.S. PATENT DOCUMENTS								
EXAMINER INITIAL		DOCL	IMENT BER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE	
	AA23								
	AB23								
	AC23								
	AD23								
	AE23			-					
	AF23								
	AG23								
	AH23								
	Al23								
	AJ23								
	AK23								
				FOREIGN	PATENT DOCUMENTS	1		1	
EXAMINER INITIAL			UMENT IBER	DATE	COUNTRY	CLASS		TRANSLATION	
IIIIII	AL23	11011	IDEI\		333,1111	- 02 100	000.00.00	Yes	
	AM23		-					Yes No	
	AN23							Yes No	
	AO23		<del>.</del>					Yes	
								No Yes	
	AP23	J	OTHER (I	ncluding Auth	│ or, Title, Date, Pertinent F	Pages etc.)	ll:	No	
	T	,	•						
	AR	<u>23</u>	Hui, E.KW., particles but 1999).	, et al., "Hepatitis cannot be envelo	B viral core proteins with an N-toped," <i>J. Gen. Virol. 80</i> :2647-265	erminal extens 59, Society for	sion can assemb General Microbi	le into core-like ology (October	
	AS	23	Lo, K.KW., electrochemi	Lo, K.KW., et al., "Surface-modified mutants of cytochrome P450 <sub>cam</sub> : enzymatic properties and electrochemistry," <i>FEBS Lett. 451</i> :342-346, Elsevier Science B.V. (May 1999).					
	АТ	23		Rudolf, M.P., et al., "Molecular Basis for Nonanaphylactogenicity of a Monoclonal Anti-IgE Antibody," <i>J. Immunol. 165</i> :813-819, American Association of Immunologists (July 2000).					
EXAMINER						DATE	CONSIDERED		
				her or not citation is h next communication	s in conformance with MPEP 609. tion to Applicant.	Draw line thro	ough citation if no	t in conformance	

		Page 24 of 25
	ATTY. DOCKET NO. 1700.0030003/JAG/BJD/SJE	APPLICATION NO. 10/733,582
FORM PTO-1449	FIRST NAMED INVENTOR	
	Renner et al.	
INFORMATION DISCLOSURE STATEMENT	FILING DATE	ART UNIT
	December 12, 2003	1614

EXAMINER	1	DOCUMENT	0.5	. PATENT DOCUMEN			1		
INITIAL		NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE		
	AA24								
	AB24								
	AC24								
	AD24								
	AE24								
	AF24					,			
	AG24			-					
	AH24								
	Al24								
	AJ24								
	AK24								
			FOREI	GN PATENT DOCUM	ENTS				
EXAMINER	1	DOCUMENT		,		SUB SLASS	TRANSI ATION		
INITIAL		NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION Ye		
	AL24						N Ye		
	AM24						N		
	AN24						Ye N		
	AO24						Ye N		
							Ye N		
	OTHER (Including Author, Title, Date, Pertinent Pages, etc.)								
	AR	Willis, A	.E., <i>et al.</i> , "Immur	ological properties of foreigns: 79-83, Elsevier Science F	gn peptides in multiple		nentous		
	AS	the Asse	Zhou, S., and Standring, D.N., "Cys Residues of the Hepatitis B Virus Capsid Protein Are Not Essential for the Assembly of Viral Core Particles but Can Influence Their Stability," <i>J. Virol.</i> 66:5393-5398, American Society for Microbiology (1992).						
	AT	Internati complete	International Preliminary Examination Report for International Application No. PCT/IB99/01925, search completed on August 18, 2000, European Patent Office, Munich						
XAMINER					DATE	CONSIDERED			

	<del> </del>	Page 25 of 25
	ATTY. DOCKET NO. 1700.0030003/JAG/BJD/SJE	APPLICATION NO. 10/733,582
FORM PTO-1449	FIRST NAMED INVENTOR	
	Renner et al.	
INFORMATION DISCLOSURE STATEMENT	FILING DATE	ART UNIT
	December 12, 2003	1614

									<del></del>
				U.S. PA	TENT DOCUMENTS	. ,			<del></del>
EXAMINER INITIAL		DOCU	JMENT BER	DATE	NAME	CLA	SS	SUB-CLASS	FILING DATE
	AA25								
	AB25								
	AC25								
	AD25								
	AE25	_							
	AF25								
	AG25	<u> </u>						"	
	AH25			,					
	Al25								
	AJ25								
	AK25								
	<u> </u>		<u> </u>	FORFIGN	PATENT DOCUMENTS				
EXAMINER		DOCUMENT		TOREIGN FATERT BOOOMERTO					
INITIAL			/BER	DATE	COUNTRY	CL	ASS	SUB-CLASS	TRANSLATION
									Yes
	AL25	<u> </u>							No.
	AM25								Yes No
	AN25								Yes No
	AO25								Yes No
	AP25						3		Yes No
			OTHER (I	ncluding Auth	nor, Title, Date, Pertinent	Page:	s, etc.)		
	AR	<u>25</u>	International Search Report for International Application No. PCT/IB99/01925, mailed on June 29, 2000, European Patent Office, The Hague, Netherlands						
	AS	<u>25</u>							
	AT	<u>25</u>					·		
EXAMINER		L	·				DATE (	CONSIDERED	